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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,317	03/12/2004	Yiren Hong	STL11425	8219

7590 05/03/2006

Seagate Technology LLC
1280 Disc Drive
Shakopee, MN 55379

EXAMINER	
KAYRISH, MATTHEW	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/799,317	HONG ET AL.	
	Examiner	Art Unit	
	Matthew G. Kayrish	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6, 7, 9, 13-17, 22, 26, 27, 34 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Peter (US Patent Number 5459627).

3. Regarding claims 1, 9, 15, 22 and 27, Peter discloses:

A disc media retainer comprising:

A disc hub member (figure 6, item 12a) having a central bore (figure 6, item 12a5) extending between an open top and an open bottom (See figure 6), the central bore having a threaded interior surface configured to receive a threaded spindle hub (column 7, lines 1 & 2);

An annular flange attached to the disc hub member and surrounding the central bore (figure 6, item 12a3); and

A data storage disc having a central opening defining an interior edge surrounding the disc hub member, the disc mounted on the annular flange (figure 6, item 13).

4. Regarding claim 2, Peter discloses:

The disc media retainer of claim 1, wherein the disc is mounted on the annular flange by an adhesive (column 2, lines 16-19).

5. Regarding claim 6, Peter discloses:

The disc media retainer of claim 1, wherein the disc hub member, the annular flange and the data storage disc are integrally formed (column 4, lines 55-65).

6. Regarding claims 7 and 34, Peter discloses:

The disc media retainer of claim 1, wherein the disc includes a top surface that is positioned at or below a top surface of the disc hub member surrounding the open top (figure 6, top surface 12a2 is positioned above top surface of the disc 13).

7. Regarding claims 13 and 35, Peter discloses:

The disc drive of claim 9, wherein the disc media retainer is positioned at or below a top surface of the spindle (figure 6, top surface 12a2 is even with the top surface of the spindle 12a14).

8. Regarding claim 14, Peter discloses:

The disc drive of claim 9, wherein a top surface of the disc hub member adjacent the open top is positioned at or below a top surface of the spindle (figure 6, top surface 12a2 is even with the top surface of the spindle 12a14).

9. Regarding claim 16, Peter discloses:

The disc of claim 15 including a data storage portion supported by the disc hub portion (figure 6, disc 13 is mounted on annular flange 12a3).

10. Regarding claim 17, Peter discloses:

The disc of claim 16, wherein the data storage portion is thinner than the disc hub portion (figure 6, disc 13 is thinner than disc hub member 12a).

11. Regarding claim 26, Peter discloses:

The disc drive of claim 22, wherein the data storage disc is positioned at or below a top surface of the spindle (figure 6, disc 13 is mounted below top surface of spindle 12a14).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 3-5, 8, 10-12, 19-21, 23-25 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peter, in view of Kazmierczak et al (US Patent Number 6724567).

14. Regarding claims 3, 23 and 28, Peter fails to disclose:

The disc media retainer of claim 1, wherein the disc hub member includes an assembly feature adjacent to the open top, the assembly feature is configured to assist in the mounting of the disc media retainer to a spindle.

Kazmierczak et al disclose:

The disc media retainer of claim 1, wherein the disc hub member includes an assembly feature adjacent to the open top (figure 8, item 30a is fit in hole of item 32), the assembly feature is configured to assist in the mounting of the disc media retainer to a spindle (column 8, lines 23-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Peter's disc drive with the media retainer containing an

assembly feature of Kazmierczak, because the media retainer with an assembly feature will make it easier to assemble the media retainer to the spindle.

15. Regarding claim 4, 20, 25 and 29, Peter fails to disclose:

The disc media retainer of claim 3, wherein the assembly feature includes a plurality of slots.

Kazmierczak et al disclose:

The disc media retainer of claim 3, wherein the assembly feature includes a plurality of slots (figure 7-2, item 72).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Peter's disc drive with the media retainer containing slots of Kazmierczak, because the media retainer can place special tools in these slots to secure itself to the spindle of the disc drive.

16. Regarding claim 5, 12, 21, 30 and 33, Peter fails to disclose:

The disc media retainer of claim 4, wherein two of the slots are positioned on opposite sides of the disc hub member.

Kazmierczak et al disclose:

The disc media retainer of claim 4, wherein two of the slots are positioned on opposite sides of the disc hub member (figure 7-2, item 72).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Peter's disc drive with the media retainer of Kazmierczak, because the media retainer acts as a wedge which secures itself onto the spindle of the disc

drive, this acts to secure the disc hub member in place, so as to prevent sliding or rotating when mounting a disc.

17. Regarding claim 8, Peter fails to disclose:

The disc media retainer of claim 1 including:

A second annular flange attached to the disc hub member (figure 12-2, item 82); and

A second data storage disc (figure 12-2, item 8) having a central opening defined by an interior edge surrounding the disc hub member (See figure 8), the second data storage disc mounted on the second annular flange (figure 12-2, disc 8 is mounted on second flange 82).

Kazmierczak et al disclose:

The disc media retainer of claim 1 including:

A second annular flange attached to the disc hub member (figure 12-2, item 82); and

A second data storage disc (figure 12-2, item 8) having a central opening defined by an interior edge surrounding the disc hub member (See figure 8), the second data storage disc mounted on the second annular flange (figure 12-2, disc 8 is mounted on second flange 82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Peter's disc hub member with a second annular flange for supporting a second disc, as taught by Kazmierczak et al, because providing for plural discs in one disc drive is well known in the art, and is highly popular in multi-disc changers.

18. Regarding claim 10 and 31, Peter fails to disclose:

The disc drive of claim 9, wherein the spindle includes an assembly feature configured to assist in the mounting of the disc media retainer to the spindle.

Kazmierczak et al disclose:

The disc drive of claim 9, wherein the spindle includes an assembly feature (figure 6, item 70) configured to assist in the mounting of the disc media retainer to the spindle (column 8, lines 23-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Peter's disc drive with the media retainer containing an assembly feature of Kazmierczak, because the media retainer with an assembly feature will make it easier to assemble the media retainer to the spindle.

19. Regarding claim 11, 24 and 32, Peter fails to disclose:

The disc drive of claim 10, wherein the assembly feature is formed in a top surface of the spindle.

Kazmierczak et al disclose:

The disc drive of claim 10, wherein the assembly feature is formed in a top surface of the spindle hub (figure 5, item 68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made provide Peter's disc drive with the spindle of Kazmierczak, because the spindle acts as a wedge, which secures itself within the bore of the disc hub member to

secure the disc hub member in place, so as to prevent sliding or rotating when mounting a disc.

20. Regarding claim 19, Peter fails to disclose:

The disc of claim 15, wherein the disc hub portion includes an assembly feature adjacent the open top, the assembly feature configured to assist in the rotation of the disc during installation of the disc onto a spindle hub.

Kazmierczak et al disclose:

The disc of claim 15, wherein the disc hub portion includes an assembly feature (figure 7-3, item 50) adjacent the open top, the assembly feature configured to assist in the rotation of the disc during installation of the disc onto a spindle hub (column 8, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Peter's disc drive with the media retainer of Kazmierczak, because the media retainer acts as a wedge which secures itself onto the spindle of the disc drive, this acts to secure the disc hub member in place, so as to prevent sliding or rotating when mounting a disc.

21. Claim 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peter, in view of Kazmierczak et al (US Patent Number 5880905).

22. Regarding claim 18, Peter fails to disclose:

The disc of claim 15, wherein the disc hub portion is formed of metal.

Kazmierczak et al disclose:

The disc of claim 15, wherein the disc hub portion is formed of metal (column 6, lines 11-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the disc hub of metal, as taught by Kazmierczak, because metal disc hubs are stronger and more flexible than plastic hubs.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Greco Kayrish 4/26/2006

MK

4/26/2006

ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER